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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/775,601

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Brent L. Hild

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08/25/2008

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EXAMINER

TAWFIK, SAMEH

ART UNIT

PAPER NUMBER

3721

NOTIFICATION DATE

DELIVERY MODE

08/25/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DLNYDocket@bakerbotts.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/775,601	<b>Applicant(s)</b> HILD ET AL.	
	<b>Examiner</b> Sameh H. Tawfik	<b>Art Unit</b> 3721	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-42 and 71-76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-42 and 71-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-42 and 71-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrenk (U.S. Patent No. 3,589,958) in view of Chisholm (U.S. Patent No. 3,765,922).

Regarding claims 20-22: Schrenk discloses a blown film process for making a fiber reinforced film capable to be used of manufacturing fiber reinforced bag, comprising the steps of providing at least one thermoplastic resin (Fig. 1; via first extruder 11); melting the at least one thermoplastic resin (column 2, lines 10-12; via “heat plastified synthetic resinous thermoplastic material”); extruding the at least one thermoplastic resin through an extension die (via extruder 11) to form a film bubble; introducing a plurality of fibers inside of the film bubble (via filament reinforcing material 31); distributing the fibers inside of the film bubble (via through discharge opening 34); collapsing the film bubble after introducing the plurality of fibers so as to form a fiber-reinforced film (Fig. 1; via upper through rollers 47 and 48), the fiber-reinforced film having a first thermoplastic layer (via extruder 11), a second thermoplastic layer (via second extruder 12), and a plurality of fibers dispersed there-between, see for example (Fig. 1; via yarn of reinforcing material 31). Note that it is clear and inherent Schrenk’s tube been used to make and form bags.

Schrenk does not disclose the steps of forming a first and a second body panel from the fiber-reinforced film; nor closing the first and second body panels along two opposing sides/ folding the film to form one of the opposing sides of the bag nor folding the web to form a bottom to form the fiber-reinforced bag. However, the examiner takes an official notice that such steps of forming bags by closing first and second body panels of plastic films along two opposing sides via by folding one of the opposing sides and folding the web to form a bottom is old, well known, and available in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Schrenk's method of forming fiber web, to further have steps of forming fiber bag following the steps of forming the fiber web, in order to come up with one machine for forming fiber web and producing fiber bag as well.

Schrenk does not disclose the step of providing the fiber in a pre cut shape nor the step of distributing the plurality of pre cut fibers in a "fluidized stream". However, Chisholm discloses a similar method with providing a plurality of pre cut fibers been distribute in a fluidized stream (Figs. 1 and 3; via 14' and 34'; via as distributing the fiber takes place with the help with the atmospheric air and/or air blown through head 33 within the tube, which could be considered as "fluidized stream"). Note that it is inherent Chisholm's formed tube will be used to form and make bags.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Schrenk's by substituting the yarn of material 31 by pre cut fibers with distributing the fibers in a fluidized stream manner, as suggested by Chisholm, in order to easily control the desired thickness of the web (column 1, lines 55 and 56).

Regarding claim 23: Schrenk discloses that wherein the first and second body panels are respectively formed from two distinct portions of fiber reinforced film (via two different extruders 11 and 12).

Regarding claim 24: Schrenk discloses that wherein the at least one thermoplastic resin is selected from the group consisting of polyolefms, polyesters, nylons, alkenyl aromatic polymers, polyvinyl chlorides, and combinations thereof (column 1, lines 26-30).

Regarding claim 25: Schrenk discloses that the thermoplastic resin is a blend of thermoplastic resins (column 2, lines 10 and 12; via “synthetic resinous thermoplastic material”).

Regarding claim 26: Schrenk does not specifically discloses that the thermoplastic resin comprises a blend of a polyolefin and a cyclic olefin copolymer. However, it would have been an obvious matter of design choice to blend a polyolefin and a cyclic olefin copolymer to form thermoplastic resin, since applicants have not disclosed that such the use of specific blend solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Schrenk’s thermoplastic resin.

Regarding claims 27-30: Schrenk disclose that the total thickness of the first and second thermoplastic layer is from about 0.2 mil to about 2.0 mil and/or about 0.4 mil to about 1.0 mil; and the thickness of the fiber reinforced film is from about 0.8 mil to about 2.0 mils and/or 1.0 mil to about 1.6 mils, (see for example Figs. 1, 3, and 4).

Regarding claim 31: Schrenk discloses that the extension die is an annular die (via die 14).

Regarding claims 32, 75, and 76: Schrenk does not disclose that the fibers are electrically charged. However, the examiner takes an official notice that such fibers are capable of being

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electrically charged and such way of electrically charging fibers is old, well know and available in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Schrenk's method by electrically charging the fibers, as a matter of engineering design choice, in order to improve it's quality and toughness.

Regarding claims 33 and 34: Schrenk discloses that wherein the plurality of fibers contacts and adheres to an inner surface of the film bubble (Fig. 1; via the reinforced material been dispensed to the inner surface of the tube and been adhered to it).

Regarding claims 35 and 36: Schrenk discloses that wherein the extruding is performed using at least one horizontal/vertical extruder (Fig. 1; via extruders 11 and 12; one could be consider as horizontally oriented while the other broadly could be consider as vertically oriented).

Regarding claim 37: Schrenk discloses that wherein the plurality of fibers is a thermoplastic material (column 1, lines 28 and 29 "synthetic fibers").

Regarding claims 38-41: Schrenk does not specifically disclose that the plurality of fibers is formed from at least two thermoplastic materials; from a polyolefine and a cyclic olefin copolymer; two layers; nor an additive to assist in adhering the plurality of fibers to an inner surface of the film bubble. However, it would have been an obvious matter of design choice to have the plurality of fibers been formed from at least two thermoplastic materials; from a polyolefine and a cyclic olefin copolymer; two layers; and having an additive to assist in adhering the plurality of fibers to an inner surface of the film bubble, since applicants have not disclosed that such specification solves any stated problem or is for any particular purpose and it

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appears that the invention would perform equally well with Schrenk's fibers and the way it is been contacting the tube.

Regarding claims 71 and 72: Schrenk discloses that the first thermoplastic layer and the second thermoplastic layer are substantially not in contact, Fig. 1; via upper and lower surfaces of tube 16a substantially separated by the reinforcing material 31.

Regarding claims 73 and 74: Chisholm discloses the step of distributing the fibers between layers in a randomized patter, see for example Fig. 3.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Schrenk's by substituting the yarn of material 31 by pre cut fibers with distributing the fibers in a fluidized stream manner in a randomized patter, as suggested by Chisholm, in order to easily control the desired thickness of the web (column 1, lines 55 and 56).

### ***Response to Arguments***

Applicant's arguments filed 07/11/2008 have been fully considered but they are not persuasive.

Applicants mainly argue that the applied art of Chisholm '922 does not disclose the claimed "fluidized stream" regardless to the blown air as shown in Fig. 3, as applicants argue that such blown air been used to form a bubble in that advanced tube. The examiner maintains that regardless to the main purpose of using air blown out of head 33, it is still helping on distributing of the fibers within the tube, which could be consider "fluidized stream".

Alternatively, by flying of fibers as a result of spinning the centrifugal 35 at certain speed and the

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effect of the force of the inside air of the tube, could still be considered and equivalent to the claimed "fluidized stream".

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is 571-272-4470. The examiner can normally be reached on Tuesday - Friday from 9:00 AM to 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sameh H. Tawfik/  
Primary Examiner, Art Unit 3721